



SCAD

POSTPROCESS

CASE STUDY

SCAD Educates the Next Generation of Additive Manufacturing Professionals with Automated Post-Processing

OVERVIEW

CHALLENGE:

With students producing approximately 2,000–2,500 3D-printed parts each quarter, manual support removal was taking valuable time from students and staff, limiting the projects the lab could support within SCAD's accelerated 10-week calendar.

SOLUTION:

SCAD integrated the PostProcess® BASE™ and DEMI 830™ to automate support removal for FDM and PolyJet parts, creating a more efficient post-processing workflow while giving students hands-on experience with industry technologies.

RESULTS:

The BASE and DEMI 830 reduced manual post-processing time and increased efficiency, giving both staff and students more capacity to support projects while giving students more time to design, iterate, and develop real-world manufacturing skills.

THE CHALLENGE: MANUAL SUPPORT REMOVAL LIMITS STUDENT PROJECT CAPACITY

The Savannah College of Art and Design (SCAD) is a private, nonprofit university specializing in degree programs for creative careers. SCAD integrates 3D printing throughout more than 40 academic programs, giving students hands-on experience with the same technologies and workflows used in today's manufacturing environments.

Every quarter, hundreds of students rely on the university's additive manufacturing lab to transform concepts into functional prototypes and presentation-quality models. From proof-of-concept designs to fully functional projects, students are able to gain real-world experience bringing ideas to life through additive manufacturing. To support these projects, the lab operates **twelve Stratasys FDM printers** for large functional parts and **three Stratasys PolyJet printers** for highly detailed, full-color models, producing approximately 2,000 to 2,500 printed parts each quarter.

With an accelerated 10-week academic calendar, students must move quickly

from concept to final presentation. The additive manufacturing lab is also operated by a small team of full-time staff supported by student employees, making efficiency critical to keeping projects on schedule.

Previously, manual support removal consumed valuable time from the students and staff members. This traditional post-printing process also created workflow bottlenecks, and limited the number of projects the lab could support. Ultimately, it took time away from what matters most - giving students hands-on experience with professional manufacturing workflows.



SCAD Student Project, Using a Combination of FDM & PolyJet

As automated post-processing becomes increasingly common across the additive manufacturing industry, exposing students to these technologies helps prepare them for careers after graduation.

THE SOLUTION: BRINGING AUTOMATED POST-PROCESSING INTO THE LAB

To support both education and workflow efficiency, SCAD integrated the **PostProcess® BASE™ FDM Support Removal Solution** and **DEMI 830™ PolyJet Support Removal Solution** into its additive manufacturing lab. By automating support removal, students can move more efficiently from printing to finished parts while gaining experience with the same post-processing technologies used in professional manufacturing environments.

FDM printers are primarily used to produce proof-of-concept models and functional prototypes. To support the lab's high-throughput environment, parts are processed in the PostProcess BASE for automated support removal using a spray-based system. After post-processing, students finish their parts with priming and painting.



SCAD Student Project

For high-fidelity presentation models, SCAD uses its Stratasys PolyJet printers to produce detailed, full-color parts. Students first remove the bulk of the support material with a pressure washer before finishing the parts in the PostProcess DEMI 830 for consistent, high-quality results.

Throughout the process, lab staff work closely with students to determine the best manufacturing approach for each project. Depending on the size, geometry, color requirements, and intended application, students may combine FDM, PolyJet, vinyl printing,

fabric printing, or flatbed printing to achieve the desired result. This collaborative approach teaches students how to select the right technology for each application while exposing them to the complete design-to-production workflow used throughout the industry.

These solutions from PostProcess have become an integral part of SCAD's additive manufacturing lab, helping students spend less time removing supports and **more time designing, iterating, and developing the skills** they'll carry into their careers.

THE RESULTS: INCREASED EFFICIENCY & MORE TIME FOR HANDS-ON LEARNING

By integrating automated post-processing into its additive manufacturing workflow, SCAD has created a more efficient lab environment while giving students more time to focus on designing and bringing their ideas to life. Automation has reduced the time spent on manual support removal, allowing staff to focus on mentoring students and supporting more projects throughout each academic quarter.

Beyond improving day-to-day operations, automated post-processing helps prepare students for design careers by giving them access to additive manufacturing solutions they are likely to encounter in the workforce. With **reliable, consistent post-processing** integrated into the lab, students can focus on developing the skills that matter most while gaining **real-world manufacturing experience** before graduation.

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“The biggest advantage is the huge time savings for both students and lab employees. Students should spend time learning design skills, not manually removing supports.”

— **Anand Patel**

Digital Fabrication Operations
Manager, SCAD



SCAD Student Projects

About SCAD

The Savannah College of Art and Design (SCAD) is a private, nonprofit university dedicated to preparing students for creative careers through engaged teaching and learning. Founded in 1978 in Savannah, Georgia, SCAD has grown into a global university with locations in Savannah and Atlanta, as well as international locations and online learning options. The university offers more than 40 areas of study spanning art, design, architecture, fashion, entertainment, and more. With a focus on both creative excellence and career preparation, SCAD combines hands-on learning with access to industry-standard tools, technologies, and professional environments. Its diverse academic programs and collaborative approach give students opportunities to develop the creative and technical skills they need to succeed in their chosen fields. Learn more at www.scad.edu.

About PostProcess Technologies

PostProcess is the leader in automated and intelligent post-printing solutions for 3D printed and additive manufactured parts. Founded in 2014 and headquartered in Buffalo, NY, USA, with international operations in Mougins, France, PostProcess removes the bottleneck in the final stage of the 3D printing workflow, post-processing, through a combination of software, hardware, and chemistry technologies. The company's solutions automate industrial 3D printing's most common post-printing processes including support removal, resin cleaning, and surface finishing, enabling customer-ready 3D printed parts at scale. The PostProcess portfolio has been proven across all major industrial 3D printing technologies and is in use daily in every imaginable manufacturing sector. Learn more at postprocess.com.